#### **CHILE**

# MULTIPHASE PROGRAM FOR THE STRENGTHENING OF CHILE'S DIGITAL STRATEGY

(CH-L1001)

#### LOAN PROPOSAL

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Abbreviations	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387459					
Status of loan in execution and loans approved	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387463					
Tentative lending program	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387464					
Digital Agenda	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387462					
Logical framework	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387461					
Procurement table	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=387460					
Cuadro de Licitaciones y Cronograma # 355091	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=355091					
Resumen de Costos Directos e Indirectos #355093	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=355093					
Marco Lógico por Subcomponente #355094	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=355094					
Marco Lógico General del Programa #355096	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=355096					
Operating Regulations	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=354902					

#### PROJECT SUMMARY

# CHILE MULTIPHASE PROGRAM FOR THE STRENGTHENING OF CHILE'S DIGITAL STRATEGY (CH-L1001)

Financial Terms and Conditions <sup>1</sup>									
Borrower: Republic of Chile	Amortization period:	20 years							
Guarantor: Not applicable	Grace period:	3.5 years							
Executing agency: Office of the Under-Secreta Ministry of Economic Affairs, Development, a		rs of the	Disbursement period:	3 years					
		Amount 1 US\$000s	s)						
Source	Phase I	%	Phase II	Interest rate:	Based on LIBOR				
IDB (Ordinary Capital)	13,233	69.3	6,457	Inspection and supervision fee:	0%				
Local	5,860	30.7	2,767	Credit fee:	0.25%				
Other/Cofinancing	=	-	-						
Total	19,093	100	9,224	Currency:	United States dollar drawn on the Single Currency Facility of the Bank's Ordinary Capital				
Project at a glance									

#### Project objective:

To contribute to greater and more effective participation by Chile in the digital era, increasing access to and use of information and communication technologies (ICTs) as a development factor, through institutional strengthening and implementation of a series of strategic initiatives to reinforce the strategy.

#### Special contractual conditions:

See paragraphs 3.10-3.12. The loan contract will include the following conditions: (I) Precedent to the first disbursement of the loan: Evidence that: (a) the program's executive management has been created and is functioning and has the necessary resources and core staff for commencing the operation; (b) the Operating Regulations have entered into force, and (c) the annual work plan (AWP) for the first year of program execution has been presented; (II) Precedent to the first transfer of resources for subcomponents to be implemented by coexecuting agencies, evidence that: (a) interagency agreements, the terms of which have been agreed with the Bank, have entered into force between the executing agency and each coexecuting agency, (b) specific accounts have been opened for transfer of the proceeds of the financing and the local counterpart to the coexecuting agencies; and (c) project leaders have been appointed for each coexecuting agency; (III) Special execution conditions: The following must be presented to the Bank for consideration: (a) in the last quarter of each calendar year, a draft of (i) the AWP for the following year of the program, and (ii) each interagency agreement between the executing agency and the coexecuting agencies updated to the following year of the program (b) in the first six months of the program, evidence that there are procedures for monitoring the program's financial accounting and performance indicators.

Exceptions to Bank policies:						
None.						
Project consistent with country strategy:	Yes [X]	No [ ]				
Project qualifies as:	SEQ[]	PTI[]	Sector [ ]	Geographic [ ]	Headcount [ ]	
Verified by CESI on: 18 June 2004						
Environmental and social review: See para	agraph 4.8					
Procurement: See paragraphs 3.14-3.15						

- The interest rate, credit fee, and inspection and supervision fee mentioned in this document are established in accordance with document FN-568-3-rev. The Board of Executive Directors may modify the corresponding rates in the light of information available at the time and the respective Finance Department recommendation. Under no circumstances may the credit fee exceed 0.75%, or the inspection and supervision fee 1%. (\*)
- In no circumstances may the inspection and supervision fee charged in a given six-month period be more than the result obtained by dividing 1% of the loan amount by the number of six-month periods in the original disbursement period.

#### I. FRAME OF REFERENCE

#### A. Connectivity in Chile

1.1 The levels of penetration and connectivity displayed by Chile not only surpass all other Latin American countries, but also are almost 2½ times greater than the norm for its development level.¹ Countries with Chile's per capita income hypothetically should have around 100 Internet connections per 1,000 inhabitants, whereas the actual number is roughly 250. This high level of "connectivity capacity" or "e-readiness" is explained not only by the country's vigorous economic growth and open trade practices, but especially by institutional factors: close collaboration between the public, private and academic sectors; public policy capacity; strategic vision; and political will. These factors are all reflected in Chile's digital strategy, known as the Digital Agenda (AD).

## B. The country's strategy in the sector: the Digital Agenda

- 1.2 Chile was the first Latin American country to prepare a digital development strategy. In mid-1998 it set up a *Presidential Commission on New Information and Communication Technologies*, which in January 1999 presented the paper "Chile: Towards the Information Society". In June 2000, a Presidential Directive appointed a Ministerial Committee on Information and Communication Technologies, which organized its activity in the following five domains: universalization of access, human resources training, e-government, enterprises, and legal framework. Leadership was defined for each one; and initiatives were promoted such as the National Infocenters Network and the Digital Literacy Campaign.
- 1.3 In March 2003, the President appointed the Under-Secretary for Economic Affairs as government ICT coordinator (i.e. a type of CIO); and a public-private committee was set up with the task of a preparing a Digital Agenda (AD) to guide the country's technological development in the period 2003-2005. Mid-April 2003 saw the first meeting of the Digital Action Group (GAD)—a task force encompassing the leading sectors in development of the digital economy in Chile;<sup>3</sup> and GAD proposals formed the basis for the Digital Agenda, which was designed with input from over 180 experts and leaders from both the public and private sectors, and unveiled by the President of the Republic in March 2004. In the AD setting, and

Economist Intelligence Unit, *The 2004 E-Readiness Rankings*; and authors' calculations.

Of the 61 actions proposed, 11 were deemed to be of high priority, and 10 were completed and surpassed. Available at: http://www.minecon.cl/economiafinal.nsf/0/a5a3e60fc5033bab04256cfd0053ed4f/\$FILE/\_08dk6ir35btk62or9c5fn6rr3d5im8ob4btkmspjfe9mm2or9k9n6asrg.pdf. The initiatives included: the Enlaces and REUNA programs, the start of the infocenters and the public procurement programs, the digital signature proposal, regulation of access costs, and startup of the State intranet.

<sup>&</sup>lt;sup>3</sup> The GAD consists of 22 representatives from the public and private sectors. See http://www.agendadigital.cl.

with wide ranging public-private agreement, the government has defined a set of strategic targets for the country's bicentenary in 2010, together with a Plan of Action for 2004-2006 containing 34 initiatives grouped in six action areas: democratization of access, education, and training, online courses, digital development of companies, startup of ICT industries, and legal framework.<sup>4</sup>

#### C. The main short-term challenges

1.4 Promotion of the Chilean digital agenda faces three key short-term challenges, which this program seeks to overcome, namely a fragile institutional operational architecture, shortcomings in access and social capital for the information society, and the need for progress in particularly critical sectors that are lagging far behind in terms connectivity, such as health and local governments.

#### 1. Institutional architecture

1.5 **Operational institutional framework** for e-government is embryonic in Chile. In addition to assigning e-government development tasks to the State Reform and Modernization Program (PRYME), the post of Chief Information Officer (CIO) was created in March 2003, with specific responsibility for organizing and facilitating the development of ICTs nationwide. Nonetheless, despite these mechanisms and their close coordination, progress in developing the e-government institutional architecture that is needed throughout the central government has been insufficient; and institutions are lacking to successfully embrace complex crosscutting information management projects (back office). E-government in Chile has basically developed on the back of isolated initiatives in various public services, and rates of growth and achievement are uneven. Although there are coordination mechanisms, as mentioned above, and a substantial supply of e-government services.<sup>5</sup> many services are not widely used by citizens and/or the organizations they are intended for, some of which, such as the *ChileCompra* public procurement system, have a crucial role to play in the Chilean AD. Strengthening and transforming this institutional framework is the first challenge the program will address.

See http://www.agendadigital.cl.

The most important mechanisms for coordination and leadership of e-government activities have been: the Ministerial Committee on Information and Communication Technology (which operated between 2001-2003); the State Modernization and Reform Project (PRYME), attached to the Ministerial Office of the General Secretary of the Presidency (now coordinator of the e-government strategy); and the team responsible for formulating the Digital Agenda (2003-2004).

- There is currently a very heterogeneous set of solutions in the e-government area, 1.6 which require integration of public functions (crosscutting projects).<sup>6</sup> Although various attempts at coordination and promotion have succeeded in organizing the process to some degree, the model remains a "virtual" one7 requiring a more comprehensive vision permitting coordinated exchange of experiences, management of complex technology projects, optimization of solution standardization, agreements on information exchange, joint negotiations with suppliers, etc. The progress achieved has convinced those responsible for e-government of the need for greater functional integration among the various initiatives. The challenge is to solve the lack of coordination among: (i) State institutions, to enable them to develop back-office systems for electronic data sharing, thereby making such information available as specific requirements for carrying out procedures, information that the State holds on individuals, etc; and (ii) the various actors that work directly or indirectly in the information technology area within the State machinery.8
- 1.7 **Integrated platform.** At the present time, the information held by the central government is scattered among the various organizations and is only available for specific tasks pertaining to the agency in question. Despite being one of the strategic tools for efficient management of governance, because information is not easily exchangeable, it cannot be made available on a timely and reliable basis to serve the needs of individuals or organizations, whether public or private. In view of this situation, during the last few years a number of State bodies have devised solutions, through bilateral agreements, which make it possible to deliver information services with various operational models and degrees of automation. The new Administrative Procedures Act (Law 19,880 of May 2003) sets forth ground rules for the administrative procedures that govern the actions of State bodies. This new legislation stipulates deadlines for the completion of administrative acts, incorporating principles of celerity, procedural economy,

For example: the State Procedures Portal; electronic invoicing; electronic declaration and payment of taxes and pension contributions; receipt and payment of civil certificates; applications for housing subsidies, and State funds (education, sport); the National Geographic Information System (SNIT); the National Infocenters Program; the State Payments Portal; the public-sector digital broadband network (Ruta 5D); the integrated platform of electronic services for procedures; the State intranet connectivity and communications network; the public-sector procurement and contracting information system (*ChileCompra*); the State financial management modernization project (SIGFE); and the single window facility for firms.

The most important mechanisms for coordination and leadership of e-government activities have been: the Ministerial Committee on Information and Communication Technology (which operated between 2001-2003); the State Modernization and Reform Project (PRYME), attached to the Ministerial Office of the General Secretary of the Presidency (now coordinator of the e-government strategy); and the team responsible for formulating the Digital Agenda (2003-2004).

An analysis of the profile of State information technology units (UIEs) reveals a clear lack of uniformity, in terms of their size, professional level of their staff, leadership profile, positioning in the organization structure, or the management capacity of their senior officers.

nonformalization, and inexcusability. It also establishes the citizen's right to information on the status of any procedure in which he or she has an interest, and to be excused from submitting documents that are not related to the procedure in question, or which are already in the government's possession. Lastly, it establishes that information use should comply with the restrictions in the Personal Information Privacy Act. The new legislation also sets legal deadlines for completing individual procedures, and establishes the principle of positive administrative silence.

- 1.8 To meet the requirements of the new legislation, an electronic platform needs to be developed, which: (i) allows any personal information collected in the possession of State agencies to be available; (ii) allows for different degrees of technological maturity among the various services; (iii) guarantees high levels of security; (iv) delivers high levels of availability; and (v) is based on freely published open standards in terms of data format, information exchange, and levels of security. To address these challenges, and as an outcome of the project preparation and execution facility (PROPEF) (see paragraph 2.3), business designs have been developed, together with technological, economic, financial, organizational and institutionality models, which form the basis of the proposal to develop and implement a new integrated State electronic services platform. To complement development of the integrated platform, procedures need to be redesigned, standardized, and digitized. The PROPEF study on the classification and modeling of procedures made it possible to develop a legally compliant process model, with a highly calibrated defined structure.
- 1.9 **Public Procurement.** In August 2003, the government pushed for a reform of the public procurement market, through a massive expansion of the *ChileCompra* system, and new legislation requiring municipios, the military, and all central government agencies to gradually channel their purchases through the www.chilecompra.cl portal. This reform is intended to afford maximum transparency, access, and efficiency to the more-than 300,000 business opportunities generated by the State annually, totaling US\$2.5 billion. Although www.chilecompra.cl has been operating since 2000, the portal has not managed to position itself or deploy its full potential. Analysis shows that the takeoff has been slow owing to: (i) cultural resistance and ignorance of e-commerce tools; (ii) low installed capacity to develop supply management, in terms of both human and technological resources; and (iii) the electronic portal being designed as an information platform rather than as a transactional tool.

#### 2. Access and social capital for the information society in Chile

1.10 A vital aspect of Chile's digital strategy are public policies to generate social capital for universalization of access and mass training of human resources. The digital strategy can be expected to generate social capital by fostering mass access to ICTs, and, consequently, increased interconnectivity between individuals, thereby helping to enhance their social organization capacity, citizen participation, and the exercise

of individual and collective rights in relation to governance. The program's second challenge is to strengthen infocenter and digital literacy programs for catalytic sectors of the population.

- 1.11 The infocenter network consists of a complex web of institutions with varied interests, highly heterogeneous target populations, and very dissimilar technical capabilities. In view of these differences, the capacities generated need to be better exploited. The Telecommunications Subsecretariat (SUBTEL) coordinates the National Infocenters Program, which identifies synergies between the various infocenter operation initiatives. Development of the infocenter network has been characterized by rapid and haphazard expansion; a proliferation of different business models with little convergence and low levels of mutual complementarity: limited local content in the services they supply; vulnerability and heavy reliance on current financing sources; and little awareness of the infocenter network in the community at large, particularly among target populations in given geographic areas. Efforts have already begun to coordinate the various infocenter networks, and many institutions have joined in coordination efforts over the past year.<sup>9</sup> Chilean experience shows that the development of access infrastructure is not sufficient to guarantee universal access. Rather than physical access, the problem for many citizens consists more in obtaining skills and developing new personal capacities and knowledge to make use of ICTs. The National Digital Literacy Campaign (CAD) needs to be deepened to promote a quantum leap in the use of ICTs among Chilean citizens. The aim of this campaign is to mobilize resources to train over half a million Chileans over 15, who are outside the school system and lack training and practice in the use of ICTs, to enable them to operate and incorporate these technologies in support of their social and employment functions. In 2003, the group responsible for construction of the Digital Agenda set up a National Coordination Unit<sup>10</sup>, attached to the Ministry of Education, with responsibility for digital literacy.
- 1.12 The campaign's main target population consists of groups that have received little training in the education system and have problems obtaining employment (e.g. housewives, microentrepreneurs, unemployed youth, military service conscripts, social leaders, and the indigenous population), for whom this initiative represents an opportunity to overcome situations of marginality and inequity. The campaign involves coordination of various public- and private-sector initiatives, and the respective executing agencies have jointly developed large-scale training

<sup>9</sup> Working groups also operate alongside infocenters and the National Coordination Unit (monitoring and evaluation, cadastre and dissemination, sustainability and contents), and regional mechanisms.

The coordination unit (campaign management) articulates and coordinates the different public and private sector players, identifies existing synergies, and generates concrete collective action mechanisms.

programs,<sup>11</sup> based on the National Infocenters Network, and training centers offering a total of over 1,500 access points throughout the country. The CAD has an overall target of providing digitally literacy to half a million people, with specific targets for each of the groups mentioned, the achievement of which will be supported in this program.

#### 3. Two critical sectors: digital health and local e-government

- 1.13 The government has identified two areas that are critical in terms of social impact on the AD but where digital development is sluggish, namely health and local governments. Revitalizing these two sectors, which are central to the government's connectivity strategy, is the third challenge to be tackled by this program.
- 1.14 **Health.** The health policy pursued by the present government involves the creation of new instruments: (a) to restructure the Health Authority to ensure a balanced distribution of responsibilities in terms of health protection and disease care among the population throughout the country (Health Authority Act); (b) to prepare and implement a universal healthcare plan giving explicit guarantees in terms of access, timeliness, quality and cost of health care for high-impact diseases (the AUGE plan); (c) to improve the system's clinical and administrative management through performance and self-management agreements; (d) to adapt and effectively incorporate ITs into the public health system; (e) to restructure management and budgetary mechanisms for healthcare network administrators and some of the establishments that comprise them; and (f) to refocus service management away from establishments towards the support network.
- 1.15 Using PROPEF resources, the Ministry of Health has finalized and approved a Health Sector Information Technology Master Plan (PDTIS), which sets out the activities needed to fulfill the strategic health-sector goals mentioned above. The diagnostic study characterizes ITs in the health sector as follows: (i) local applications are not mutually compatible, which generates difficulties in terms of data integration and aggregation; (ii) the largest deficit is in primary healthcare; (iii) although the National Health Fund (FONASA) has implemented information systems that support insurance company management, its relationship with healthcare establishments in the National Health Services System is limited to that between insurer and provider; and (iv) the lack of comprehensive information systems hinders the availability of information to support the management, use, and allocation of resources at the sector level to account for demand and its epidemiological characteristics.

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The training program agreed consists of a free course of 18 hours average total duration, provided under the leadership of a training agent *(capacitador)*, with support from materials (manuals and software) specially designed to facilitate learning for each executive initiative. The minimum contents give citizens basic training in the use of the computer and Internet navigation, to enable them to start using IT tools to search for information that is relevant to them on the web, communicate by e-mail, produce and record information using a wordprocessor.

- 1.16 The PDTIS strategic vision sees ITs as the central pillar for: (i) healthcare activity processes; (ii) clinical and public health management; (iii) control of system performance; and (iv) coordination of the participants in the public health system. A set of immediate-priority activities have been defined to strengthen IT management capacity in the health sector; and once this has been achieved, initiatives need to be designed and implemented relating to the platform and processes that will support the information systems needed for effective health sector management.
- 1.17 **Local governments.** Under half of the 346 municipal governments in Chile use the Internet, and only 3% have transactional services in place. Website development is uneven and does not display a common structure in terms of content, format or technical specifications. What little progress has been made has occurred in a small number of municipios and focused essentially on citizen services. Studies show that at least 78 municipalities, to a greater or lesser degree, have capacity to implement a municipal procedures facility; and these account for nearly 88% of the country's total revenue from municipal registrations. Nonetheless, there are no internal process standards that a municipality must comply with in processing documents, or dealing with interactions between the public bodies involved in their procedures.
- 1.18 The Presidential Directive for the Development of Electronic Government (May 2001) and the Digital Agenda 2004-2006 make the Regional Development and Administration Subsecretariat of the Ministry of the Interior (SUBDERE) responsible for directing Chile's digital strategy at the regional and municipal government levels. Although SUBDERE does not have an organizational unit exclusively responsible for local e-government issues, a team has been formed internally to coordinate the corresponding activities.

#### D. The Bank's strategy with the country and sector

- 1.19 The *Bank's strategy with Chile* for 2000-2006 is centered on support for:
  (a) initiatives that **enhance competitiveness**; (b) actions to **reduce social and regional inequalities and improve the quality of life**; and (c) mechanisms that elicit greater citizen participation in the development process, and the process of **modernization of the State**. This project is linked to two strategic objectives: modernization of the State, and greater competitiveness and integration into the new international economy.
- 1.20 The *Bank's strategy paper on modernization of the State*<sup>12</sup> propounds the view that sustainable and equitable growth depends on the quality and efficiency of public policies and governance. Five potential areas are identified for action: (a) developing and strengthening civil service systems based on criteria of merit and flexibility; (b) strengthening the fiscal capacity of the State and enhancing the efficiency and transparency of expenditure management; (c) improving capacity to

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<sup>&</sup>lt;sup>12</sup> Document GN-2235, July 2003.

formulate and coordinate public policies and strategies; (d) modernizing approaches to public service management; and (e) exploiting the potential of the knowledge society and information technologies. The present project fits in with the last of these areas.

### E. Coordination with other official development finance agencies

1.21 The Municipal Institutional Strengthening Program (PROFIM), financed by the World Bank and implemented by SUBDERE, seeks to improve municipal management. This program complements PROFIM by providing technical and financial assistance for municipalities to formulate and execute projects that increase their human, financial, and technical capacities.

#### F. Lessons learned

- 1.22 The main challenge of e-government is not technological, but a matter of overcoming organizational and institutional divisions within the State. <sup>13</sup> Introducing ICTs by changing established structures and processes can often provoke resistance and result in failure. E-government initiatives need to be set in more general processes of transformation and change, in which the potential benefits are not confined to just one organization. Many of the changes required reach beyond a single service or Ministry, and the desired benefits will not be achieved unless information "silos" are avoided.
- 1.23 Lessons learned on information society development in recent few years include: (i) A suitable institutional environment needs to be in place, both inside and outside government. The traditional operating structure of IT management in the public sector, in which officials responsible for information technology are at the third or fourth level of the hierarchy is inadequate. The model used by the private sector and many public agencies in developed countries, which includes the post of "Chief Information Officer" at executive level, is a benchmark to bear in mind. Chile has already taken the initial steps in this direction; but, given the size and complexity of the public sector, along with its institutional architecture and incentives structure, the process is still in its early stages; this program will support government efforts to develop the institutional architecture; (ii) e-government needs to be more government and less electronic, since the aim is not to remain at the digital frontier, which is less and less a source of comparative advantages, 15 but instead to bring government closer to citizens and firms, using digital media for this purpose (i.e. ICT as a means rather than an end). This program contains a set of

See *Building the Virtual State: Information Technology and Institutional Change*, Jane Fountain, The Brookings Institution, 2001.

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In the United States, over 43% of CIOs report directly to the CEO (see CIO Magazine, State of the CIO, May 2004).

<sup>&</sup>lt;sup>15</sup> See Nicholas G. Carr: "IT Doesn't Matter", *Harvard Business Review*, May 2003.

initiatives to support the development of public policies and government programs using electronic media; (iii) it is crucial to ensure that investment in technology, and particularly in e-government, yields **results that are measurable and verifiable** and address the real needs of citizens and enterprises. The purpose of the program is to achieve measurable and verifiable goals, based on targets specified by the Government of Chile as set out in the AD; and (iv) e-government programs designed exclusively from the supply-side (addressing the needs of the service or the provider institution) represent a **partial view**. This program will develop public capacity (technical and institutional) in electronic government, and introduce incentives and mechanisms to make the demand for e-services effective.

1.24 The Technology Development and Innovation Program (1286/OC-CH) currently under execution, includes an ICT subprogram, which, although mainly geared towards private enterprise, also contains activities to support the Chilean public sector. This program contributed to preparation of the Digital Agenda, and experiences gained from its execution have been built into this operation.

See GAO, Electronic Government: Success of the Office of Management and Budget's 25 Initiatives Depends on Effective Management and Oversight. GAO-03-495T March 13, 2003; and Electronic Government: Initiatives Sponsored by the Office of Management and Budget Have Made Mixed Progress, Report GAO-04-561T, March 24, 2004.

#### II. THE PROGRAM

#### A. Objectives and description

- 2.1 The program's **general objective** is to contribute to greater and more effective participation by Chile in the digital era, expanding access to and use of information and communication technologies (ICTs) as a factor for development, through institutional strengthening and implementation of a series of strategic initiatives to reinforce the strategy.
- 2.2 To achieve this objective, the program is structured in three components: (i) Strengthening of crosscutting institutionality for the management of electronic government; (ii) Generation of social capital for the information society; and (iii) Support for pilot strategic projects in e-government.

## B. Program structure

- 2.3 Chile has made great strides not only in the development of e-government, but particularly in the design of a digital strategy founded on consensus among relevant public and private stakeholders, and the establishment of short- and medium-term targets consistent with this. The program will support implementation of that strategy. During the program preparation stage, the Bank provided financing of US\$644,000 project from the Project Preparation Facility (PROPEF) for studies needed to order and align these short- and medium-term goals, which have different implementation times. The studies involved 26 consultancies (both individual consultants and firms) conducted over a six-month period. The program has been divided into two phases in order to fulfill the logic of activity sequencing. The program's multi-phase nature reflects a three-pronged motivation: the first phase coincides with the 2004-2006 targets of the Digital Agenda, and also with the Chilean electoral calendar; secondly, the permanent changes occurring in the ICT sector advise against implementing long-term projects that are too inflexible, but call instead for gradually phased-in development; lastly, and in terms of content, the first phase aims to underpin IT institutionality and initiate pilot projects that would be expanded in the second phase, with adjustments being made to issues requiring institutional improvement and extension of results.
- Phase I. The estimated total cost of phase one is US\$18.9 million. This initial phase, which is to be completed in two and one half years, entails the following activities: (i) support for the management of e-government; (ii) support for implementation of the Administrative Procedures Act; (iii) public procurement; (iv) digital literacy; (v) infocenters; (vi) digital health; and (vii) local e-government.

  Phase II. The second phase, at a total cost of US\$9.2 million, will continue the activities in items (ii), (iv), (vi), and (vii) above. From phase 1 to phase 2

(**Triggers**): the indicators agreed as triggers for commencement of any phase II are set out in the following table:

Subcomponent	Trigger indicator	Means of verification
1.2. Support for implementation of Administrative Procedures Act	The integrated platform is implemented in at least 5 national governance institutions.	Delivery to the Bank in month 30 of the program of an evaluation report prepared by an independent consultant based on agreed criteria, confirming that the platform has been implemented satisfactorily in the five institutions indicated.
	Implementation of redesigned administrative procedures with ICT support as programmed.	Evaluation by an independent consultant of progress in implementing redesigned processes with ICT support. This evaluation will be available by the 30th month of the project.
2.1 Digital literacy	Program impact evaluation system operating and measuring the quantity and quality of training.	Delivery to the Bank of a methodology for measuring program impact based on prior diagnostic indicators.
	New models of digital literacy approved for implementation.	Documents proposing models approved and available.
	At least 250,000 people trained under the program in 24 months of operation.	Delivery to the Bank of evaluation reports on the first 24 months' of system operation, showing that at least 250,000 people were trained under the program.
3.1 Digital health	Performance agreements in force with two selected hospitals and being implemented.	(i) Delivery to the Bank's satisfaction of a report on the methodology and criteria for selection and implementation of pilot schemes; (ii) execution agreements signed with the two hospitals delivered to the Bank by month 24; (iii) an evaluation report indicating satisfactory implementation, based on the defined criteria, delivered to the Bank by month 30.
	100% of national providers authorized under a new provider registry system.	By month 30, the Ministry database will contain records of all individual and institutional suppliers authorized according to the definitions and criteria of the proposed registration system.
3.2 Local e- government	Municipal procedures facility (Web platform) operating in 8 pilot municipalities.	Delivery to the Bank in month 30 of the program: An operational checklist verifying compliance with service level agreements (SLAs), and monthly reports on operation of the automated procedures service (statistics).
	Analysis of economic viability of the business model approved to the Bank's satisfaction.	Delivery to the Bank of the document approving the plan for project supervision by SUBDERE.
	Bidding process initiated for private operation of the	Terms of reference approved by the Bank, and bidding documents published.

municipal procedures	
window facility.	

- 2.5 In order to achieve the stated goals, phase I of the proposed program will finance activities in the following three components:
  - 1. Strengthening of crosscutting institutionality for management of electronic government (US\$9.4 million)
- 2.6 The aim of this component is to strengthen institutions for the development of e-government in Chile. The component will finance three subcomponents: (i) support for e-government management (institutional architecture); (ii) development of the integrated platform of electronic State services (support for implementation of the Administrative Procedures Act); and (iii) strengthening of public procurement transparency and efficiency (*ChileCompra*).
- 2.7 **Support** of e-government (institutional for management architecture) (US\$800,000). This subcomponent aims to exploit PRYME human and technical capacities to support the coordination of crosscutting projects, implementation of a technological system to support monitoring in these projects, expand the use of available services by designing and implementing a publicity campaign to raise awareness and the positioning of electronic services available to citizens and/or civil society organizations. This subcomponent, to be executed by the State Reform and Modernization Program (PRYME), attached to the Ministerial Office of the General Secretary of the Presidency, will focus on: (i) dissemination of outcomes achieved by international consulting services in the PROPEF framework; 17 (ii) creation of an executive secretariat to coordinate the implementation of crosscutting AD initiatives; and (iii) promotion strengthening of the State information technology community, for transfer and exchange of content, knowledge, experience and results among staff working in State IT units, in order to build on the outcomes achieved, generate economies of scale in IT management, and speed up the process of change arising from the challenges posed by the spread of e-government.
- 2.8 The subcomponent will finance: (i) four workshops and the production of documents for discussion and dissemination of the new institutional structure; (ii) technical assistance to support the coordination and implementation of crosscutting projects; (iii) technical assistance to design and implement a technological system to support project monitoring activities; (iv) design and coordination of a campaign to publicize the supply of e-government services;

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A number of activities were carried out in the PROPEF stage with support from international and local consultants, aimed at proposing institutionality alternatives for the development of e-government in Chile. For this purpose, the most outstanding and successful international experiences were considered, in conjunction with the specific conditions of the Chilean institutional structure.

- (v) technical assistance to generate norms and standards in five projects by public institutions with high levels of institutional maturity, technology and human resources; (vi) development of the State information technology community (support for the community website, support for the creation of three IT subcommunities in areas to be defined, such as: health, education, the legal and juridical domain, etc.); (vii) holding of two annual conferences of the information technology community; (viii) holding of workshops, internships and training workshops; and the development of three tools to enable community members to exchange various types of information, through a variety of media: documents, software, video, audio, online courses, etc; (ix) holding of two workshops to raise awareness on online training (*e-learning*) for 100 people each; and (x) holding of 40 two-day courses (16 hours duration) for 30 persons each, at a rate of four courses per month over a 10-month period, in conjunction with SUBTEL to provide ICT training for the public sector.
- 2.9 Support for implementation of the Administrative Procedures Act (integrated platform improvement State electronic services and processes) (US\$6.1 million). This subcomponent consists of two different projects, which complement each other, since both aim to facilitate implementation of the Administrative Procedures Act. The first project is the *Electronic Services* Platform, and the second is Support for Public Services in Implementing the Law. The integrated platform aims to: (i) make personal data exchangeable between State bodies, according to their competencies; (ii) support different degrees of technological maturity to facilitate the incorporation of State institutions; (iii) guarantee high levels of security and 24/7 availability; and (iv) make use of freely published open standards in terms data format, information exchange, and levels of security. The aim of the *first project*, to be executed jointly by the Internal Revenue Service (SII) of the Ministry of Finance and by the Ministerial Office of the General Secretary of the Presidency State Reform and Modernization Project (PRYME), is to provide support for implementation of the Administrative Procedures Act by developing an integrated electronic State services platform. The project will provide support for: (i) definition of a set of standards on information exchange between State bodies (2005); (ii) implementation of the platform in at least one service (2005); (iii) definition of the legal and regulatory frameworks needed to regulate information exchange between phase I bodies (2005); and (iv) facilitate the integration of procedures in the pilot organizations (2006).
- 2.10 This first project to support implementation of the integrated platform will finance the following: (i) studies to complement those carried out by PROPEF; and (ii) implementation of phase I of the platform in five organizations. The complementary studies include financing to develop detailed engineering for preliminary models designed in PROPEF, including the platform's business model (commercial), the organization and institutionality model, the operational model, the technical model (architecture, standards), the legal and regulatory model, the financing plan, and the implementation plan (development, platform integration and

implementation, and technical implementation strategy). Sequenced financing will be provided to implement the integrated platform in five public agencies: the Internal Revenue Service, the Civil Registry and Identification Service, the General Treasury of the Republic, the Ministry of Housing and Urban Development, and the Social Security Normalization Institute.

- 2.11 The *second project* in this subcomponent will assist public services in implementing the Administrative Procedures Act through the redesign, standardization and digitization of 20 public administration procedures of high public value, grouped together in four basic categories. Achieving this means simplifying services to citizens, cutting processing times, and making State actions more transparent. Financing will be provided for the following activities: (i) technical assistance for the design and execution of four pilot projects, each of which aims to redesign and assimilate a common standard to a selected group of approximately four procedures associated with four institutions. This will make it possible to obtain 16 new standardized procedures based on their assimilation to four basic types.
- 2.12 The project involves coordination and redesign work together with the pilot institutions to secure the agreements and commitments needed to implement the technological solution.<sup>18</sup> A workflow tool will be designed (defining the flows of work needed by each procedure to be digitized, the actors involved, deadlines, business rules, and the service standards to be applied, among other process parameters); implementation of a common technological platform establishing a link between the workflow application and systems pertaining to each of the bodies in which the procedures reside; and implementation of digitized procedures in the institutions using technological support. This project will result in a set of administrative procedures defined in accordance with the model, which will receive computerized support from a workflow tool that will define the sequencing of actions to be carried out, based on the parameters of each operation. It will also control the deadlines committed to, detect exceptions, and make it possible to monitor the progress of each specific procedure. Another relevant aspect involves acquisition of the technological infrastructure (basic hardware and software) to implement the administrative procedures support solution.
- 2.13 **Program to strengthen transparency and efficiency in public procurement** (*ChileCompra* US\$2.5 million). This subcomponent, to be implemented by the Public Procurement and Contracting Directorate (*ChileCompra*), attached to the Ministry of Finance, aims to help consolidate the transparency and efficiency of

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The main activities to be carried out in each project are as follows: survey of standard procedures, redesign and standardization of procedures according to standard procedural models, technical specifications (flows of processes, functional requirements, and others), adjustments in regulations and practices in each institution, as needed for subsequent implementation, definition of requirements and design of a plan for organizational change.

public procurement processes, by installing technology and supply management capacities in public bodies participating in the system through a comprehensive program. The specific objectives are to: (i) consolidate the new electronic public procurement platform, incorporating additional development, and working to integrate it with other public procurement systems; (ii) generate and install technical, human resource, and management capacities in public bodies, in order to take full advantage of the potential of e-commerce; and (iii) consolidate within the Public Procurement and Contracting Directorate (DCCP) the use of framework agreements for the implementation of new processes, establishing oversight mechanisms and procedures that support widespread use of this procurement modality. This subcomponent will carry out activities in three projects; (i) electronic platform and technology; (ii) formation and training; and (iii) procurement management and framework agreements.

- 2.14 The Electronic Platform and Technology project includes the execution of all initiatives aimed at maintaining an up-to-date electronic platform with the functionalities needed to achieve optimal digitization of the entire procurement cycle. These include integration with other public-sector systems and other public procurement systems, development of complementary services, and implementation of a national suppliers network, among other things. The following initiatives in particular will be financed: (i) development of electronic document standards; (ii) interoperability with other public procurement systems; (iii) development of complementary services; (iv) integration of ChileCompra with other information services; and (v) improvement of the system product catalogue. The *Electronic* Platform project aims to obtain the following results, among others: (i) a robust product catalogue, enabling users to select system products with quality and efficiency; (ii) interoperability with other public procurement systems, making it possible to carry out the basic transactions at least: quotes, bidding processes, and purchase orders; (iii) value-added services that enhance the supply chain, such as guarantee vouchers, logistics and others; and (iv) connection to other public bodies, operating regularly.
- 2.15 In the *Formation and Training* area the aim is to improve supply management and incorporate best practices in the processes performed by system-user organizations. This means providing permanent training for staff responsible for procurement at the various levels, and nurturing leaders with capacity to direct processes of organizational change resulting from introduction of the reform, in addition to solid support in addressing the needs of users, both public and private, for their incorporation into the *ChileCompra* system. The project will therefore run an extensive training program throughout the country, including workshops, courses (diplomas) on supply management, advisory programs on supply management, creation of networks, in-service training, and portal operation at basic and advanced levels. It also includes training for small and medium-sized enterprises to equip them with the tools needed to participate in other public procurement markets. Specifically, four training programs will be financed, aimed at public services

- provided by central government, municipios across the country, health sector organizations (health services and hospitals), and small and medium-sized local enterprises.
- 2.16 The main expected outcomes are as follows: (i) 10,000 users trained and correctly using the public procurement portal; (ii) 600 staff from public agencies (services and municipios) trained in supply management at a higher education institution; (iii) approximately 100 public bodies with redefined processes and supply area structures that are consistent with the new procurement methodologies; and (iv) representatives of small firms with knowledge on how to use and operate the public procurement portal.
- 2.17 The *Procurement Management and Framework Agreements* project aims to generate policies, directives and initiatives that cut across the public sector, in order to rationalize the use of State resources in procurement and contracting processes. The project includes framework agreements on strategic high-demand products that are complex in terms of both implementation and design. Consideration has also been given to developing a project that includes advisory services for public bodies that find it hard to integrate into the State telecommunications framework agreement (Ruta 5D)—a major strategic agreement for the Chilean State to be implemented in 2005.
- 2.18 The project includes implementation of new processes in the management of framework agreements, defining indicators, norms, and procedures to ensure that these processes, measurement mechanisms and control procedures within the DCCP are effective. It also includes implementation of a system for comparative price and market analysis, strengthening of the electronic product catalogue in framework agreements, and knowledge of similar experiences in other countries with regard to electronic markets, thereby helping to improve the public procurement system.
- 2.19 The project on Procurement Management and Framework Agreements will finance five groups of activities: (i) a program to help public bodies gain access and connectivity to the Ruta 5D digital network; (ii) a study and comparative analysis of best practices in procurement management and agreements, including a comparative study of logistic entry processes in the management of framework agreements; (iii) implementation of new processes and improvements in the management of framework agreements within the Public Procurement Directorate, including implementation of an information system providing for oversight and monitoring of the management of framework agreements and the electronic catalogue, incorporating variables such as business intelligence and price, making it possible to obtain up-to-date information in real time; (iv) strengthening of the framework agreement electronic catalogue; and (v) development of a framework agreement evaluation program, to measure user satisfaction (buyers and suppliers), and service quality in framework agreements and the electronic catalogue, as a

feedback mechanism for making improvements, through the following lines of action. This includes conducting surveys of service quality aimed at target groups (suppliers and purchasers); a program of regional workshops with local suppliers for dissemination, promotion, and participation in framework agreement processes, and their evaluation; and measurement of the impact of framework agreements and the electronic catalogue, which will require a study to be contracted to evaluate the analysis, impact, and use modality of the *ChileCompra* electronic catalogue.

2.20 By the end of the project, it is expected to have a consolidated structure for framework agreements in place within the Public Procurement and Contracting Directorate, with measurement and oversight procedures and mechanisms implemented; and that all public bodies will be using framework agreements as the normal modality in procurement processes.

#### 2. Generation of social capital for the information society (US\$2.8 million)

- 2.21 The objective of this component is to support the strategy for universalization of access that forms part of AD 2004-2006, in order to reduce the digital divide in Chile, and optimize access to and use of current ICT infrastructures. There are two subcomponents: (i) support for the National Digital Literacy Campaign (CAD); and (ii) infocenters.
- 2.22 **Digital literacy campaign (US\$1.7 million).** The aim of this subcomponent to be implemented by the Ministry of Education through the digital literacy campaign, is to help extend the use and ownership of ICTs towards population groups in Chile that are highly susceptible to digital exclusion, by gradually and consciously incorporating them into the knowledge society.
- 2.23 The subcomponent includes activities to strengthen the strategic aspects of the campaign, including: (i) definition of a comprehensive communication strategy; (ii) standardization and guarantee of the supply of basic ICT training in an equal-opportunities framework (young people, women heads of household, microentrepreneurs, the unemployed, employees, indigenous population); (iii) prepare training agents, who are the visible face of the campaign vis-à-vis the citizen, to transfer competencies to users; (iv) develop a unified and centralized management system, integrating data and results from the various campaign executors; (v) establish a monitoring system, with separate impact and process indicators, to evaluate progress in fulfilling campaign objectives, both among direct beneficiaries (micro level) and nationwide (macro level); and (vi) promote interinstitutional coordination among the executors of digital literacy initiatives, supporting the coordination unit of the National Digital Literacy Campaign (an executive mechanism for participation and debate, led by the management, the immediate aim of which is to publicize and share common experiences in order to maximize the campaign's effects).

- 2.24 The subcomponent will finance: (i) development of a communication and awareness-raising campaign; (ii) management strengthening for the National Digital Literacy Campaign (equipment, strategic technical advisory service, administrative and communications support); (iii) technical assistance to strengthen training programs currently being offered through the Internet access network, which forms part of the digital literacy campaign, for specific target population groups; (iv) technical assistance to develop an information and monitoring system; and (v) technical assistance to develop a model for evaluating the impact of the CAD, including a "digital observatory" for the campaign.<sup>19</sup>
- 2.25 Development of the public information and awareness-raising campaign will include the hiring a communications agency to establish the communications and public relations strategy, production and graphic design,<sup>20</sup> audiovisual production, measurement of impact and analysis of the communications strategy, development of product placement,<sup>21</sup> client service system (call center) to receive queries from the public (definition of the project, information on training locations), comments and complaints, and development of the CAD website.
- 2.26 Bearing in mind that the campaign's key intervention is channeled through digital literacy courses, a major part of the management effort will focus on supervising, securing and strengthening existing training models. Innovative digital literacy models are expected to be constructed, for execution after the campaign (2006 onwards). The program will therefore finance: (i) design of the CAD competencies model; (ii) development of the CAD competencies system; (iii) execution of three innovative digital literacy models;<sup>22</sup> (iv) design of 10 specific courses (older adults, youth, disabled, indigenous peoples); (v) production and distribution of support materials for the courses. Strengthening of the work of training agents is envisaged with a view to improving the supply of training. The training agent acts as an interface between citizens who receive digital literacy training and policymaking mechanisms at the national level. Work will be done to develop a training agents

This "digital observatory" will be based on a series of national and local studies to evaluate the social impact of the campaign, and it will also produce a strategic digital literacy proposal for future implementation and inclusion of technologies at the social level once the campaign has ended (2006-2010).

Execution of the communications strategy will essentially involve placing publicity graphics in locations that are heavily frequented by the target public (public service centers, welfare centers, schools, infocenters, etc.).

This involves contracting a firm with special expertise in integrating specific issues into the production of large audience television programs (drama productions produced by the main TV channels). The idea is to incorporate the presence of digital literacy into the script, and transmit the advantages of technologies in terms of personal and social development, through a specific personality in a given television sitcom.

The idea here is to implement three different projects, entrusted to three different national institutions (through enterprise consultancies) with specialist expertise in running innovative mass training models through a variety of communications media (TV, radio, press, Internet, CD).

- accreditation system, construct a virtual collaboration space between training agents, and develop a volunteer training agent system.
- 2.27 **Infocenters (US\$1.1 million)**. The goal of this subcomponent, to be implemented by the Office of the Under-Secretary for Telecommunications (SUBTEL) of the Ministry of Transport and Telecommunications, is to establish an interinstitutional management model to plan, manage, and consolidate the National Infocenter Network. The aims are, firstly, to guarantee a healthy economic and social return on the investment, mainly using public resources, and secondly, to ensure the sustainability of this initiative bearing in mind the need for Chile to consolidate public sector supply that is meeting growing demand from lower-income groups. This component includes activities to: (a) guarantee a supply of quality products and/or services that are highly relevant for users of the National Infocenter Network; (b) increase ownership and empowerment among stakeholders in the National Infocenter Network from both the supply and the demand side; and (c) increase the effectiveness and efficiency of coordination (management) of the National Infocenter Network.
- 2.28 The subcomponent will finance: (i) design of a methodology for selecting best practices, and preparation and implementation of a plan for the transfer of management technologies (dissemination) between infocenters (for example, intervention methodologies, use and development of technological applications, dissemination strategies, training, etc.); (ii) design and execution of training programs for infocenter operators; (iii) implementation of a competitive fund for resource allocation to promote infocenter sustainability; (iv) preparation of a navigation manual to facilitate the use of e-government initiatives; (v) design, development, and implementation of a shared technological platform, including services and contents, for National Infocenter Network users; (vi) development and implementation of the Infocenter Management Evaluation and Oversight System; (vii) strengthening of regional coordination mechanisms throughout the country, and development of a regional work program with stakeholders from the ICT sector; (viii) updating of the National Infocenter Registry; and (ix) identification of infocenter types, and their classification and categorization according to proposed parameters. This includes a proposal for a program of mergers between infocenters, and criteria to guide and regulate the sustainable growth of the National Infocenter Network.

#### 3. Support for strategic pilot projects in e-government (US\$4.6 million)

- 2.29 The objective of this component is to support strategic projects and initiatives aimed at successfully implementing the Digital Agenda strategy in two areas: (i) digital health; and (ii) local governments.
- 2.30 **Digital health (US\$3.6 million)**. The aim of this subcomponent, to be executed by the Office of the Under-Secretary for Health of the Ministry of Health, is to start

development of the master plan in support of health reform implementation, and particularly implementation of the AUGE Plan guarantee system, in the framework of information system strengthening, and the definition and implementation of information technology support tools. The component includes activities to (a) identify experiences and implement pilot health services; (b) formulate standards and develop IT competencies in health service provision and management processes; (c) develop pilot IT experiences in health service networks; and (d) develop supplier registration systems and processes that facilitate access to health service procedures.

2.31 The program will finance the following activities: (i) <u>Coordination</u>, <u>administration</u> including operation of the subcomponent's and evaluation: Administrative Coordination Unit; (ii) Review of successful development experiences in the sector: the aim here is to identify and record successful experiences of systems development in the health sector; (iii) Management of change in the health sector: this activity is divided into two subactivities, namely evaluation and development of IT competencies, which aims to harmonize, standardize and create competencies among IT staff adapted to the new sector strategy, with periodic evaluation of performance; and supervision of change, which aims to install offices for change locally and appoint a Director for Change at the central level, with responsibility for defining and implementing the communications strategy to support PDTIS implementation; (iv) Definition of technological standards: this involves proposing codification standards in at least the following areas: services rendered, procedures, standard document formats, and HL7 localization, verifying their use through diagnostic reports on degree of use: (v) Formulation of the detailed IT architecture: this will define the basic components of the IT sector architecture, including the following at least: detailed standards, hardware and software structure, and single control of access and privileges for applications at the sector level; (vi) Development of a pilot hospital management system: implementation of two pilot schemes for hospital management systems, including administration of detailed clinical history and electronic prescription; (vii) Development of the supplier registration system: development of a supplier registration system, to guarantee beneficiaries adequate conditions for quality care, through a rigorous process of accreditation and certification of public and private health providers; (viii) Development of a one-stop shopping facility for <u>access to health procedures:</u> development of an application (single-window facility) for centralized reception of procedural requirements, and for authorizations and complaints relating to health services (especially information on users' rights and the handling of claims from insurers and service providers). Use will be gauged by tools measuring the degree of user satisfaction; and (ix) Internal flow of procedures and authorizations: development of a workflow for monitoring and resolving cases relating to the Health Authority, activated by requests for procedures and authorizations from internal and external users.

- 2.32 The respective goals for the these activities are as follows: (i) produce administrative and financial reports, conduct bidding processes, and monitor and evaluate the activities listed below; (ii) install at least one successful experience in 10 pilot health care establishments; (iii) introduce the new professional profiles required by the sector in this new stage of development, particularly targeting the administration of health information and management of IT service contracts; (iv) achieve consensus among the community in favor of using the standards that are defined; (v) persuade the sector and all participating technological bodies to adopt the basic concepts that emerge from this architecture definition. For this purpose, the various local technological bodies will need to participate in the task of defining and constructing the architecture (for example, health services, hospital establishments of medium complexity); (vi) implement pilot schemes in mediumcomplexity hospitals, including their referral and counter-referral network, in order to increase health service productivity; (vii) aim to have 100% of suppliers, both public and private, authorized in the system; (viii) progressively extend the use of this single-window facility for all natural or legal persons requiring it, securing an increase in its functional capacity; and (ix) steadily raise the percentage of requests resolved satisfactorily, the number of persons attended to, with low average response time and short waiting periods.
- 2.33 **Local government (US\$1.0 million)**. This subcomponent, to be implemented by SUBDERE, aims to improve services provided to citizens, and strengthen the internal management of local governments by applying information technologies in the framework of the Digital Agenda.
- 2.34 The subcomponent includes implementation of the Municipal Procedures Window supported by a technological platform making it possible to process new municipal procedures on a centralized and standardized basis. The platform will be operated by SUBDERE in the first phase of the project; and a business model will be developed to enable the operation to be handed over to a private operator in the second phase. The Municipal Procedures Window project will be developed in coordination with the Integrated Services Platform envisaged in component 1, in order to guarantee convergence and future information exchange.
- 2.35 The following activities will be financed: (i) development and operation of an ASP Web platform service,<sup>23</sup> for the automation of municipal processes; (ii) establishment and implementation of this service in 12 municipalities in the first phase; (iii) financing of service operation for municipios incorporating into the platform, including procurement of software, hardware and communications infrastructure, and Internet connections; (iv) monitoring and evaluation of phase I pilot municipios; and (v) design, development, and implementation of a Web platform, and dissemination to strengthen the action capacity of SUBDERE for

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<sup>&</sup>lt;sup>23</sup> Active server pages.

- development of the local e-government project, in order to ensure sustainability of the activities included in this project.
- 2.36 Municipios will be chosen to participate in the project on the basis of objective criteria set out in the Operating Regulations, taking the following into account: the number of transactions in the procedures considered, level of development in IT use, experience with initiatives to simplify procedures, tax collection, population size, and the need for the project to reach into the country's rural municipios.

# C. Cost and financing

2.37 The total cost of phase I is estimated at US\$19.1 million, of which the Bank will fund US\$13.2 million, with the local counterpart covering the other US\$5.9 million. The estimated total cost of phase II is US\$9.2 million. The se amounts are itemized in the following table.

COMPONENT	Phase 1	IDB	Local	Phase 2
	2005 - 2006	70%	30%	2007-2009
1. Institutional strengthening for e-government	9,451	6,721	2,730	1,338
management				
1.1. Support for e-government management	800	560	240	-
1.2. Support for implementation of the Administrative Procedures Act	6,130	4,396	1,734	1,338
1.3. Public Procurement	2,521	1,765	756	ı
2. Generation of social capital for the information	2,760	1,932	828	1,183
society				
2.1. Digital literacy	1,686	1,180	506	1,183
2.2. Infocenters	1,074	752	322	ı
3. Support for strategic projects: e-government	4,586	3,210	1,376	5,783
pilot				
3.1. Digital health	3,614	2,530	1,084	2,886
3.2. Local e-government	972	680	292	2,897
Direct costs of components (1+2+3)	16,797	11,863	4,934	8,304
4. Executing unit	682	586	96	820
4.1. Technical assistance	360	360		540
4.2. Monitoring and evaluation	161	113	48	40
4.3. Dissemination	61	43	18	90
4.4. Operating and other costs	100	70	30	150
5. Contingencies	140	140		100
Indirect costs (4+5)	822	726	96	920
Subtotal	17,619	12,589	5,030	9,224
Commitment fee (0.25%)	41		41	-
Interest (Libor)	789		789	-
PROPEF	644	644		-
General total	19,093	13,233	5,860	9,224

2.38 The loan will be subject to the following conditions: (i) Libor-based interest rate; (ii) a credit fee of 0.25% on undisbursed loan balances; (iii) inspection and supervision fee, 0% of total loan; (iv) minimum disbursement period of three years; (v) commitment period two and one half years; (vi) grace period of three and one half years; and (vii) amortization period 20 years.

#### III. PROGRAM EXECUTION

#### A. Borrower, executing agency and co-executing agencies

- 3.1 The borrower will be the Republic of Chile, and the Economy Subsecretariat of the Ministry of Economic Affairs, Development, and Reconstruction will act as executing agency.
- 3.2 The following bodies will serve as co-executing agencies: Office of the General Secretary of the Presidency–State Reform and Modernization Project (PRYME) of the Office of the General Secretary of the Presidency; Public Procurement Directorate of the Ministry of Finance; Telecommunications Subsecretariat of the Ministry of Transport and Telecommunications; Health Subsecretariat of the Ministry of Health, Regional Development and Administration Subsecretariat (SUBDERE) of the Ministry of the Interior; and Ministry of Education Digital Literacy Campaign. Each co-executing agency will be responsible for subcomponents and activities as specified in the following table:

SUBCOMPONENT	CO-EXECUTING AGENCY					
C.1 Strengthening of crosscutting institutionality for e-government management						
Support for e-government management	Office of the General Secretary of the Presidency (SEGPRES) - State Reform and Modernization Project (PRYME) of the Office of the General Secretary of the Presidency.					
2. Support for implementation of the Administrative Procedures Act: integrated platform and process improvement	Office of the General Secretary of the Presidency (SEGPRES) - State Reform and Modernization Project (PRYME) of the Office of the General Secretary of the Presidency.					
3. Public Procurement	Public Procurement Directorate ( <i>ChileCompra</i> ) of the Ministry of Finance.					
C.2 Generation of social capital for the information society						
1. Digital literacy	Ministry of Education - Digital Literacy Campaign					
2. Infocenters	Telecommunications Subsecretariat (SUBTEL) of the Ministry of Transport and Telecommunications.					
C.3 Support for strategic projects: e-government pilot						
1. Digital health	Health Subsecretariat of the Ministry of Health.					
2. Local e-government	Regional and Administrative Development Subsecretariat (SUBDERE) of the Ministry of the Interior.					

#### B. Organization for program execution

- 3.3 Given the large number of coexecuting agencies involved, the program has been divided into three levels or mechanisms that specify and define the functions and responsibilities of strategic management, operational coordination, and project execution. Strategic orientation will be in the hands of a Strategy Committee consisting of members of the Digital Action Group,<sup>24</sup> the top-level body responsible for Chile's digital strategy. Administrative and operational coordination of all activities will be the responsibility of the Economy Subsecretariat, acting through an Executive Directorate; and implementation of the various components and subcomponents will be the responsibility of each coexecuting agency. The relation between each coexecuting agency and the program's Executive Directorate will be governed by Operating Regulations and interagency agreements, requiring the Bank's nonobjection, that need to be renewed each year.
- 3.4 **Strategy committee (CE)**: The CE will be chaired by the Deputy Secretary for Economic Affairs, Development and Reconstruction. Its main functions are: (i) to ensure the integrity of the program within the Digital Agenda, and that the various projects are aligned within this agenda; (ii) to provide advisory services and strategic guidance as required by the Deputy Secretary for Economic Affairs; and (iii) report on program progress to the Digital Action Group, through the Deputy Secretary for Economic Affairs.
- 3.5 Executive Directorate (DE): Operational and administrative coordination of the various projects in this operation will be the responsibility of the Economy Subsecretariat, which will appoint a DE for this purpose. The DE will fulfill the following functions as a minimum: (i) act as interlocutor with the Bank for technical, administrative, and financial matters; (ii) prepare and consolidate financial statements and submit them to the Bank; (iii) perform technical and financial monitoring of the program, evaluating its progress; (iv) coordinate the proposal for budgetary appropriations with the Budget Directorate; (v) supervise the general progress of the project according to CE guidelines, and the progress of each component and subcomponent through AWPs and interagency agreements; (vi) coordinate the program's technical activities; (vii) approve individual AWPs and submit a general AWP to the Bank; (viii) ensure that Bank procedures are complied with, and that the provisions of interagency agreements and Operating Regulations are fulfilled; and (ix) serve as technical secretariat for the Technical and Strategy Committees. The program will finance the institutional strengthening needed for the DE to discharge these functions. The DE will also establish a Technical Committee to monitor the project, consisting of the Executive Director (presiding) and a representative (project leader) from each of the bodies taking part

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A public-private group, created at the initiative of the President, and chaired by the Deputy Secretary for Economic Affairs, with responsibility for promoting and monitoring fulfillment of the Digital Agenda action plan. The priorities of the agenda include the activities envisaged in this program.

in the program. This committee will meet at least four times a year to resolve issues brought before it by the DE, and discharge other functions as specified in the Operating Regulations. To ensure a mechanism for coordination between those directly responsible from each of the coexecuting institutions, the Technical Committee will meet at least twice a year in expanded form. The expanded committee (CTA) will consist of only those directly responsible from each of the program's co-executing agencies.

- 3.6 **Expanded technical committee:** The CTA will: (i) ensure effective application of the program's execution plans; (ii) take cognizance of the Bank reports based on the latter's reviews and those of the Comptroller General of the Republic (CGR) based on program audits, and ensure that recommendations are implemented; and (iii) meet with the Bank's project team and missions as required.
- 3.7 **Coexecuting agencies**: The execution and achievement of objectives and targets in each subcomponent will be the responsibility of the respective coexecuting agencies. To this end, each coexecuting agency will appoint project groups under the direction of a project leader, who will report to the DE, while remaining organizationally and functionally dependent on the public institution to which it belongs. Each project leader will be responsible for execution of the activities in the respective subcomponents, ensuring that Bank hiring and disbursement procedures are fulfilled, preparing financial and program progress reports and six-monthly procurement plans for submission to the Executive Management and thence to the Bank. Project groups will consist of staff from each public institution with responsibility for component execution, supported by consultants with expertise in the relevant issues, as required.
- 3.8 **Interagency agreements**: The Economy Subsecretariat will sign interagency agreements with the coexecuting agencies, for the purpose of transferring resources, committing the coexecuting agencies to the activities to be carried out, and fulfillment of targets and indicators as established in the loan contract, the Operating Regulations, and the respective AWPs.
- Operating Regulations: The general functioning of the program will be governed by a set of Operating Regulations outlining the obligations and functions of the executing agency and participating organizations, eligibility criteria, and allocation of resources to competitive funds; and specifying procedures for selection, hiring, disbursement, record-keeping, internal control, reports and evaluation. The regulations also include: (i) activities to be financed; (ii) an exhaustive description of the implementation scheme, including the functions of the executing agency and each of the coexecuting agencies, along with all other mechanisms involved in program implementation; (iii) eligibility criteria for the allocation of competitive funds in the infocenter subcomponent; (iv) specific requirements for execution of each subcomponent; (v) program financial management procedures; (vi) the

procedures for the monitoring system, evaluation of phase I, and the baseline; and (vii) semiannual milestones or meetings for ensuring fulfillment of program targets.

## C. Special contractual conditions

- 3.10 Before the first disbursement of the loan, the executing agency must demonstrate, to the Bank's satisfaction, that: (a) the program's Executive Management is in place and functioning, with the necessary resources and staff to commence the operation; (b) the Operating Regulations are in effect; and (c) the AWP for year one has been presented. Before the executing agency makes the initial transfer of resources to each coexecuting agency, it must demonstrate, to the Bank's satisfaction, that: (a) interagency agreements between the executing agency and each coexecuting agency, drawn up on terms agreed with the Bank, are in effect; (b) specific accounts have been opened for the transfer of the financing and local counterpart resources to the coexecuting agencies; and (c) project leaders have been appointed for each coexecuting agency.
- 3.11 The following documentation must be presented to the Bank for approval: (a) in the fourth quarter of each calendar year, a draft of (i) the AWP for the following year of the program, and (ii) each interagency agreement between the executing agency and the coexecuting agencies updated to the following year of the program (b) in the first six months of the program, evidence that there are procedures for monitoring the program's financial accounting and performance indicators.
- 3.12 **Recognition of expenses**: The borrower has requested, and the team recommends that expenses incurred between 1 January 2004 and the effective date of the loan contract be recognized retroactively and reimbursed up to the equivalent of US\$1 million. Of this amount, US\$700,000 will be charged to the Bank's financing and US\$300,000 to the local counterpart to cover eligible program expenses provided that procurement procedures substantially similar to the Bank's procedures have been followed.

#### D. Goods and services procurement

- 3.13 The selection and hiring of consulting services and all program procurement will be carried out in accordance with the corresponding standard Bank procedures. International competitive bidding will be required for contracts for goods in amounts equivalent to, or greater than, US\$350,000 and contracts for consulting services of US\$200,000 or more. The selection and hiring of consulting services will be carried out in accordance with Bank procedures as established in document GN-2220-10. Financing for civil works is not envisaged.
- 3.14 For contracts valued at less than the equivalent of US\$50,000 in the case of individual consulting services, US\$100,000 in the case of goods or related services, and US\$100,000 in the case of consulting firms, the Bank may opt to review

procurement and disbursements on an ex post basis, following a trial period of at least one contract award under each type of procurement for each coexecuting agency. For hiring subject to ex post review, the executing agency will send the Bank, to the latter's satisfaction, a summary (fiche) of each hiring or procurement process.

## E. Revolving fund

3.15 The executing agency will establish separate Bank accounts for managing program funds sourced from the IDB financing and local counterpart. Once all conditions precedent to the first disbursement have been fulfilled, the Bank may advance funds against the loan to establish a revolving fund that shall not exceed 10% of the total loan amount. The executing agency will submit semiannual reports on the status of the revolving fund, to the Bank's satisfaction during program execution, within 60 days following the close of each calendar six-month period.

## F. Execution period and disbursement timetable

3.16 It is estimated that phase one of the program will be executed in two and one half (2½) years, with a commitment period of similar length, and the financing disbursed in a minimum of 36 months, according to the following tentative schedule:

	Table III-1 Disbursement schedule (in US\$000s)						
SOURCE	Year 1 (1st half)	Year 1 (2nd half)	Year 2 (1st half)	Year 2 (2nd half)	Year 3	Total	
IDB/OC	3,445	3,032	3,755	2,701	300	13,233	
Local	1,477	1,302	1,610	1,154	317	5,860	
Total	4,922	4,334	5,365	3,855	617	19,093	
% / half year	26%	23%	28%	20%	3%	100%	

#### G. Internal oversight, financial statements and audit

3.17 The DE will establish and maintain accounting systems to the Bank's satisfaction, and will maintain a proper, complete, and up-to-date files of all supporting documentation for the financial accounting part of the program. The executing agency will submit program financial statements to the Bank at the end of each budgetary year, together with supplementary information. The financial statements will be presented within 120 days following the close of the executing agency's fiscal year. These statements and documents will be accompanied by an opinion from the Comptroller General of the Republic. All financial statements, duly audited and updated, must be presented as a condition for presentation of a possible second phase of the operation. The reports must also include a "Comprehensive"

review of procurement and disbursements" prepared in accordance with terms of reference set out in document AF-500. Demonstrating to the Bank that the executing agency (Economy Subsecretariat) and the coexecuting agencies have put in place suitable systems for internal oversight and financial accounting as provided for in clause 7.01 of the General Conditions, will be a condition precedent to the first disbursement of the financing.

## H. Monitoring and evaluation

- 3.18 Program execution will be monitored through progress reports prepared by the DE and submitted to the Bank within 60 days following the end of each calendar sixmonth period, in accordance with the format and contents agreed with the Bank. Progress reports will be referenced to fulfillment of the commitments established in the program's logical framework.
- 3.19 An evaluation system will be implemented by the DE during program execution, using the procedure defined in the Operating Regulations, to measure the rate of advance of the operation and the impact of the actions envisaged. To this end, a series of baselines will be established for each subcomponent in order to gauge program results. It was also was agreed to conduct an evaluation 30 months after the effective date of the program contract. This review will have a twin purpose: (a) analysis of the progress of the various program components; and (b) information on fulfillment of the various "triggers" for progress and an eventual phase 2 of the program. Consultants will be hired to perform this evaluation in accordance with the Bank's ex ante review procedure, and the terms of reference must also be agreed with the Bank.

#### IV. VIABILITY AND RISKS

#### A. Viability

- Agenda provides the basis of political and institutional support and sufficient resources for its execution. The institutional diagnostic and technical studies carried out, supported by specialized consultancies, show that the staff participating, both in management and technical positions in the various areas, are highly qualified to join the project groups; and, based on the consensus achieved and the program's participatory design, they are well motivated to undertake a process such as the one being proposed. In addition, the execution scheme is based on existing institutionality, anchored in Chilean reality. Experience with the use of PROPEF resources shows that the institutional and technical capacity of the DE and the coexecuting agencies is suited to carrying out the actions envisaged within the available timeframe.
- 4.2 The organizational scheme jointly adopted with the Chilean authorities stresses the importance of active participation by each of the directorates, divisions and other units that are program beneficiaries. Responsibility for program execution will fall to each of these internal work teams, which will direct their efforts towards achieving results with a medium- and long-term perspective. The progress achieved with the project groups during project preparation should also be highlighted. The institutional evaluation found that both the DE and the coexecuting agencies have sufficient technical capacity and suitable institutional mechanisms in place to ensure adequate loan execution. The weaknesses identified in the evaluation process have been discussed with the executing agency, and strengthening measures have been agreed to ensure that execution risks are minimized.
- 4.3 **Logical framework, indicators, and baseline**. The team has reached agreement with the borrower on a logical framework that includes impact indicators for each component and subcomponent. Although a preliminary baseline is in place for each component and subcomponent, the agreement on the baseline will be set out in the Operating Regulations. The logical framework is attached to this document.

#### B. Benefits

4.4 *Institutional strengthening component:* (i) greater interoperability for functional and technological integration in the development of e-government, and consequently in modernization of the Chilean State; (ii) increased supply and efficiency of public services provided to citizens, with shorter waiting periods for completion of bureaucratic procedures; and (iii) greater efficiency and transparency in the State procurement process. *Social capital component for the information society:* (i) reduction of the digital divide between higher and lower income groups and

between the wealthier and poorer regions of the country, with the consequent increase in the number of citizens accessing and making use of ICTs; and (ii) greater empowerment and capacity for social coordination of citizens in terms of knowledge of their rights and complaints about services provided by the State.

4.5 Strategic projects support component: (i) in the health area, electronic records will help to improve information quality; speed of availability; possibility of cross-referencing, records and studies; and will eliminate manual work and paper-based circulation, thereby increasing the productivity of health services management and user satisfaction through faster and more effective service delivery; (ii) in the local government area, development and proper use of ICT resources in Chilean municipios and public services with a local presence will make it possible to improve services provided to citizens and firms, enhance their internal management, and increase transparency. Investment in information technologies will generate benefits in terms of value-added services, and allow for information to be provided from the government to the citizen. The results will be more effective, efficient, transparent, and participatory services, and more integrated decision-making.

## C. Social and environmental impacts

4.6 This operation does not qualify as a poverty-targeted investment or a social-equity enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (AB-1704). The activities to be financed are not expected to have any direct environmental or social impact. Nonetheless, the development of institutional capacity in support of the Digital Strategy, and execution of the projects envisaged, is expected to increase access to, and use of, ICTs by individuals and firms, improve public administration, and promote greater competitiveness in the country—all of which are positive factors for economic growth and job creation. Moreover, the program's infocenter subcomponent will target needy areas. Lastly, it is important to note that hardware recycling forms part of another initiative being promoted by the Office of the President of the Republic, entitled *TodoChilenter*.

#### D. Risks

4.7 That the program aims to develop an institutional operating framework that encompasses a wide range of public stakeholders, poses a considerable challenge in view of the shortage of operational coordination mechanisms existing in Chile today. In order to minimize this risk, the program has a public institutional base at the ministerial level to establish directives on this issue, including the post of CIO

At its meeting of 18 June 2004, the Committee on Environment and Social Impact (CESI) approved the project concept document for this operation, without calling for actions to mitigate potential environmental impacts.

for implementation of the recommendations. In the public procurement system,<sup>26</sup> the financial and institutional sustainability of the *ChileCompra* business model is vulnerable, since in the past it has faced shortfalls in the demand for its services. To mitigate this risk, the program includes activities to promote demand. Yet, the current regulations are contributing to an increasingly captive market in which suppliers have no alternatives. The success of infocenter strengthening and the digital literacy campaign depend crucially on the existence of effective demand for the services being provided. To minimize the attendant risk, technical and institutional designs should include suitable demand incentives.

4.8 Risks in the health sector relate to achieving support for the digital health strategy and involvement from professional health associations and communities; and the need to cover the costs of training and social communication processes implemented to ensure that the systems to be developed in the project can be assimilated by health professionals and users while the AUGE plan is also being implemented. To mitigate the effects of this risk, the Ministry of Health will promote training and social communication campaigns on these strategies, and will provide the necessary budgetary funding to carry out such campaigns, in the first phase of the program. The main risk in the local government area concerns the sustainability of the activities proposed, given institutional weaknesses both in local administrations and in coordination mechanisms between central, regional, and municipal governments. To mitigate this risk, the subcomponent will prioritize institutional strengthening actions, emphasizing human resource training, and encouraging the implementation of pilot projects in the first phase of the operation, as a way to incorporate lessons learned into the process of executing an eventual second phase.

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The second version of the *ChileCompra* public procurement system is currently in the implementation phase.